Amended Claims (Attorney Docket No. BHC 031002)

- (Original) A method of homogeneously, directly and quantitatively measuring molecule
 modifications, characterized in that the molecule carries a fluorescent dye and that the
 fluorescence lifetime of said molecule differs from the fluorescence lifetime of the modified
 molecule.
- 2. (Currently amended) The method as claimed in of claim 1, in which the molecule is an organic molecule, in particular a peptide or peptidomimetic, or is an inorganic molecule.
- 3. (Currently amended) The method of claim 1, wherein as claimed in claims 1 and 2, in which the fluorescent dye is may be, for example, a coumarine, a fluoresceine, a rhodamine, an oxazine, or a cyanine dye.
- 4. (Currently amended) The method of claim 1, wherein as claimed in claims 1 to 3, in which the fluorescent dye is covalently or noncovalently coupled to the molecule. A and optionally a spacer molecule may be located between the fluorescent dye and the molecule.
- 5. (Currently amended) The method of claim 1 as claimed in claims 1 to 4 for quantifying biochemical assays.
- 6. (Currently amended) The method of claim 5, wherein as claimed in claim 5, in which enzymes can carry out the following modification reactions: phosphorylation/dephosphorylation, sulfation/desulfation, methylation/demethylation, oxidations/reductions, acetylation/deacetylation, amidation/deamidation, cyclization/decyclization, conformational changes, removal of amino acids/peptides/coupling of amino acids/peptides, ring expansion/ring contraction, rearrangements, substitutions, eliminations, addition reactions.
- 7. (Currently amended) The method of claim 1 as claimed in claims 1 to 6 for the use in high throughput screening.
- 8. (Original) A reagent kit comprising fluorescent dye-molecule conjugates and other reagents required for carrying out the assay method as claimed in claims 1 to 6.

New Claims (Attorney Docket No. BHC 031002)

9. (New) The method of claim 2, wherein the organic molecule is a peptide or peptidomimetic.